ABSTRACT OF THE DISCLOSURE

The method includes the steps of determining a number of gear teeth for each gear and pinion that, in combination, would produce desired gear ratios. Current gearset parameters including distances and angles relating the positions of the gears and pinions are determined. For a predetermined angular rotation of a selected gear or pinion, and using the current gearset parameters, an error is determined representing a difference in phases of a tooth on the selected gear or pinion into its mesh cycle. A first phase is determined along a first portion of a drive path of meshing gears and pinions, and a second phase is determined along a second portion of the drive path distinct from the first portion. One or more of the current gearset parameters are repetitively changed to determine a set of correspond optimal gearset parameters, for which the error is equal to or less than an acceptable error. Then a gearset having the optimal gearset parameters is produced.